

Amendment and Response

Applicant: Ronald W. Hall et al.

Serial No.: 10/717,230

Filed: Nov. 19, 2003

Docket No.: 10971833-3

Title: METHOD AND APPARATUS FOR PROVIDING INK TO AN INK JET PRINTING SYSTEM

REMARKS

The following remarks are made in response to the Office Action mailed August 24, 2005, in which claims 19-34 were rejected. With this Amendment and Response, claims 19, 25 and 27 have been amended, and claim 24 has been canceled. Claims 19-23 and 25-34 remain pending in the application and are presented for reconsideration and allowance.

Double Patenting

Claims 19-25 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of Hall et al. (U.S. Patent No. 6,322,207). The Office Action alleges that although the conflicting claims are not identical, they are not patentably distinct from each other because they substantially claim the same subject matter. Specifically, the Office Action alleges both Hall et al. and the present application disclose a pump module for use with an inkjet printer; an air purge apparatus for allowing the removal of air trapped within the pump module where the air purge apparatus includes a septum valve; a pump actuator; a variable volume chamber; a docking bay; and a keying feature in the pump module interacting with a keying feature in the docking bay.

The Applicants respectfully decline to file a terminal disclaimer at this time, as the amendments to independent claim 19 are believed to make the allegedly conflicting claims patentably distinct from each other. Accordingly, withdrawal of the rejection of claims 19-25 under the judicially created doctrine of obviousness type double patenting is respectfully requested.

Claim Rejections under 35 U.S.C. § 103

Claims 19-25, 28-30 and 33-34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Schmidt et al. (U.S. Patent No. 5,732,751) in view of Powers et al. (U.S. Patent No. 6,139,138).

Claims 26-27 and 31-32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Schmidt et al. (U.S. Patent No. 5,732,751) in view of Powers et al. (U.S. Patent No. 6,139,138), as applied to claims 19-25, 28-30, and 33-34 above, and further in view of Hall et al. (U.S. Patent No. 6,322,207).

Applicants respectfully submit that the Schmidt et al. reference is not properly considered as prior art against the present application. In particular, the present application

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claims priority to U.S. Patent application serial number 08/566,818, filed on December 4, 1995 and issued as U.S. Patent number 5,900,896 to Barinaga et al. (Barinaga et al. '896). Applicants note that Figs. 1-17 of the present application are identical to Figs. 1-17 of the Barinaga et al. '896 patent. Applicants further note that Figs. 1, 7, and 8 of the current application are identical to Figs. 1-3 of the Schmidt et al. reference, with the exception of the addition of refill port 51 in Figs. 1 and 8 of the present application. That is, as can be seen from examining the present application and the figures of the Schmidt et al. reference, the cited elements and portions of the Schmidt et al. patent are shown identically in the present application, dating back to the priority date of Dec. 4, 1995. Because the relevant subject matter of the present application and the Schmidt et al. reference share the same Dec. 4, 1995 filing date, Applicants respectfully submit that the Schmidt et al. patent is not prior art against the present application.

Further, even if the Schmidt et al. reference is prior art under §102, it qualifies as prior art only under §102(e). Because §103(c) indicates that subject matter which qualifies as prior art only under §102(e) is not usable in a §103(a) obviousness rejection if the subject matter and the claimed invention were at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. MPEP §706.02 (1)(3), §706.07(a). At the time of the invention, Schmidt and the present application were subject to an obligation of assignment to Hewlett Packard Company as evidenced by the accompanying "Statement Regarding Common Ownership". As such, the rejections under §103(a) relying upon Schmidt et al. are believed traversed. Withdrawal of the rejection of claims 19-34 on such grounds is respectfully requested.

Claims 19-24 also stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kashio (U.S. Patent No. 3,950,761) in view of Powers et al. (U.S. Patent No. 6,139,138).

With this response, independent claim 19 has been amended to include the elements previously presented in dependent claim 24. As such, amended independent claim 19 now sets forth a method of providing ink to a printing system, the printing system including a docking bay having therein a first fluid inlet for receiving pressurized ink, the method comprising: inserting a pump module into the docking bay of the printing system to couple the pump module to the first fluid inlet within the docking bay, the pump module including a second fluid inlet for receiving ink, an air purge apparatus, and a pressurizing apparatus for

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increasing the fluid pressure of the ink before providing the ink to the first fluid inlet; coupling an ink container to the second fluid inlet; and removing air trapped within the pump module using the air purge apparatus.

Regarding the subject matter of now combined claims 19 and 24, the Office Action alleges that Kashio discloses a method of providing ink to a printing system (Fig. 1), the printing system including a first fluid inlet for receiving pressurized ink (one end of reference 8); coupling a pump module to the first fluid inlet, the pump module including a second fluid inlet for receiving ink, a pressurizing apparatus for increasing the fluid pressure of the ink before providing the ink to the first fluid inlet (abstract; Fig. 1 reference 1 for the pressurizing apparatus; Fig. 1, reference 2 for the second fluid inlet); and coupling an ink container to the second fluid inlet (Fig. 1, reference 2, 5). With particular respect to the subject matter originally presented in claim 24, the Office Action alleges the printing system includes a docking bay for the first fluid inlet, and wherein the step of coupling the pump module to the first fluid inlet includes inserting the pump module into the docking bay of the printing system (Fig. 2, reference 13).

However, Kashio is recognized as different from the claimed invention in that Kashio does not disclose an air purge apparatus and removing air trap within the pump module using the air purge apparatus, or wherein the air purge apparatus includes a septum and wherein the step of removing the air trapped within the pump module includes inserting a hollow member through the septum and applying vacuum pressure to the hollow member to draw air trapped from the air purge apparatus. Powers et al is cited as disclosing the elements deficient in Kashio, and the Office Action alleges it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Powers et al. into the invention of Kashio to gain the benefit of removing air and gas bubbles for an ink jet pen.

The rejection is respectfully traversed. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must

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both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The cited references at least fail to teach or suggest all of the claim limitations. In particular, amended independent claim 19 clearly sets forth that **the printing system includes a docking bay having therein a first fluid inlet for receiving pressurized ink**, and further that the method comprises inserting a pump module into the docking bay of the printing system **to couple the pump module to the first fluid inlet within the docking bay**. Clearly, as seen in Figs. 1 and 2 of Kashio, the support member 13 characterized as a docking bay in the Office Action does not have therein a fluid inlet of any type, nor does inserting the pressurizing apparatus 1 into the support member 13 **couple the pump module to a fluid inlet within the docking bay**. Rather, the fluid inlet and outlet of the pressurizing apparatus of Kashio are outside of and separate from the support member 13. Powers et al. fails to remedy the deficiency of Kashio.

Accordingly, for at least the reasons set forth above, the combination of Kashio and Powers et al. fails to teach or suggest each of the elements of the claimed invention.

Accordingly, withdrawal of the rejection of amended independent claim 19 under 35 U.S.C. §103(a) as being unpatentable over Kashio in view of Powers et al. is respectfully requested.

Claims 20-23 each depend directly from amended independent claim 19, which is allowable for at least the reasons set forth above. Accordingly, dependent claims 20-23 are also in condition for allowance and withdrawal of the rejection of those claims under 35 U.S.C. §103(a) is respectfully requested.

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CONCLUSION

For at least the reasons set forth above, claims 19-23 and 25-34 are believed in condition for allowance, and notice to that effect is respectfully requested.

Any inquiry regarding this Amendment and Response should be directed to either Thomas A. Jolly at Telephone No. (541) 715-7331, Facsimile No. (541) 715-8581 or Matthew B. McNutt at Telephone No. (612) 767-2510, Facsimile No. (612) 573-2005. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

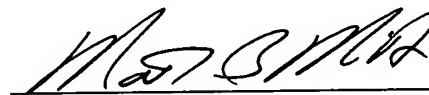
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CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 28th day of September, 2005.

By 
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